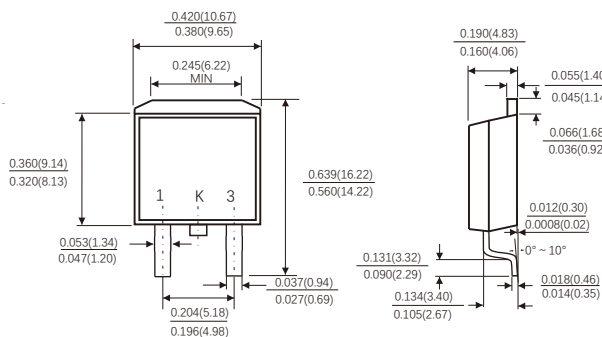


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



TO-263 D2PAK



MECHANICAL DATA

- Case: JEDEC TO-263 molded plastic body
- Terminals: Solderable per MIL-STD-202,method 208
- Polarity: As marked
- Mounting Position: Any

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters	Symbols	SR 1020D2	SR 1030D2	SR 1040D2	SR 1060D2	SR 10100D2	SR 10150D2	SR 10200D2	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	45	60	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	32	42	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	45	60	100	150	200	Volts
Maximum average forward rectified current (see Fig.1)	I _(AV)	10.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)	V _F	0.60		0.75	0.85	0.90	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	100				30			μA
	T _A =100°C	5				-			mA
	T _A =125°C	-				3			
Typical thermal resistance (Note 2)	R _{θJC}	2.5							°C/W
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR1020D2 THRU SR10200D2

FIG.1-FORWARD CURRENT DERATING CURVE

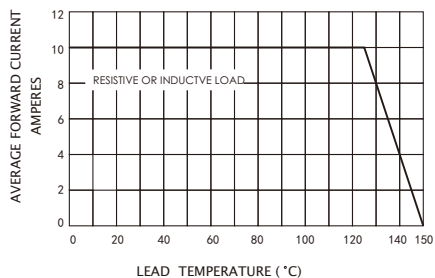


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

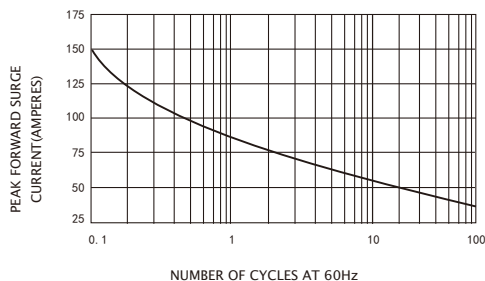


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

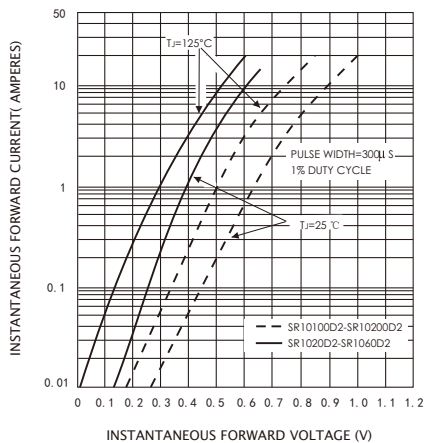


FIG.4-TYPICAL REVERSE CHARACTERISTICS

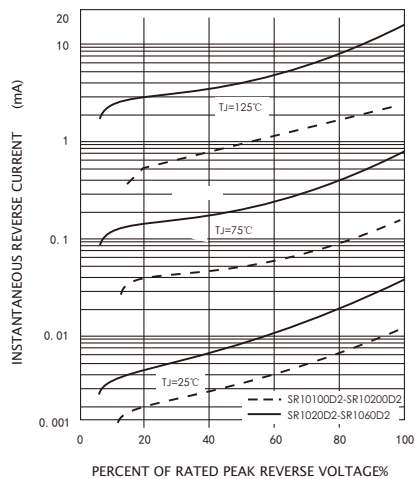


FIG.5-TYPICAL JUNCTION CAPACITANCE

